

WHAT IS CLAIMED IS:

- 1 1. A computer-implemented method for report selection in a system that
2 provides a plurality of reports, comprising:
 - 3 populating a database with selected data elements of a plurality of data
4 types;
 - 5 creating a database content table that indicates the data types of the data
6 elements present in the database;
 - 7 establishing a report table containing for each report a report identifier
8 and an associated set of report requirements, each set of report requirements
9 identifying a set of data types required for the associated report; and
 - 10 outputting a set of report identifiers for which the data types of data
11 elements in the database satisfy the associated sets of report requirements.
- 1 2. The method of claim 1, further comprising:
 - 2 creating a report description table that associates report names with the
3 report identifiers; and
 - 4 displaying a list of report names that correspond to the set of report
5 identifiers.
- 1 3. The method of claim 2, wherein the list of report names displayed are
2 selectable and linked to respective report functions that generate report data in
3 accordance with predefined formats.
- 1 4. The method of claim 3, further comprising reading the selected data
2 elements from a sequential data file prior to populating the database.
- 1 5. A computer-implemented method for selection of reports of log data
2 generated by software executing on a host data processing system, wherein the
3 log data are stored by the host system in a sequential log file of log records of
4 different log record types, the method comprising:

5 establishing a report table containing for each report a report identifier
6 and an associated set of report requirements, each set of report requirements
7 including a set of log-record-type identifiers indicating which of the log record
8 types contain log data required for the associated report;

9 reading selected log records from the log file;

10 storing log data from the selected log records in a relational log-data
11 database;

12 creating a database content table that indicates the log record types of the
13 selected log records; and

14 outputting a set of report identifiers of reports for which the log data in the
15 database content data table satisfies the set of report requirements of associated
16 report definitions.

1 6. The method of claim 5, further comprising for each log record type of the
2 selected log records, storing log data from the selected log records of the log
3 record type in a respective log data table.

1 7. The method of claim 6, further comprising:

2 reading a plurality of sets of selected log records from the log file;
3 storing log data from the plurality of sets of selected log records in
4 respective relational log-data databases;

5 creating respective database content tables for the respective relational
6 log-data databases.

1 8. The method of claim 5, further comprising:

2 reading a plurality of sets of selected log records from the log file;
3 storing log data from the plurality of sets of selected log records in
4 respective relational log-data databases;

5 creating respective database content tables for the respective relational
6 log-data databases.

1 9. The method of claim 8, further comprising:
2 creating a report description table that associates report names with the
3 report identifiers; and
4 displaying a list of report names that correspond to the set of report
5 identifiers.

1 10. The method of claim 9, wherein the list of report names displayed are
2 selectable and linked to respective report functions that generate report data in
3 accordance with predefined formats.

1 11. The method of claim 5, further comprising:
2 creating a report description table that associates report names with the
3 report identifiers; and
4 displaying a list of report names that correspond to the set of report
5 identifiers.

1 12. The method of claim 11, wherein the list of report names displayed are
2 selectable and linked to respective report functions that generate report data in
3 accordance with predefined formats.

1 13. A computer-implemented method for processing log data generated by
2 software executing on a host data processing system, wherein the log data are
3 stored by the host system in a sequential log file of log records of different log
4 record types, the method comprising:
5 reading selected log records from the log file in response to a first request
6 that includes a first code indicating at least one user-specified log record type;
7 transmitting the selected log records from the host system to a second data
8 processing system;
9 converting log data from the selected log records to a format suitable for
10 storage in a relational database and storing the data of the second format in a
11 relational database by the log record types, wherein the selected log records are

12 converted and stored in the relational database at the second data processing
13 system;

14 establishing a report table containing for each report a report identifier
15 and an associated set of report requirements, each set of report requirements
16 including a set of log-record-type identifiers indicating which of the log record
17 types contain log data required for the associated report;

18 creating a database content table that indicates the log record types of the
19 selected log records; and

20 outputting a set of report identifiers of reports for which the log data in the
21 database content data table satisfies the set of report requirements of associated
22 report definitions.

1 14. The method of claim 13, further comprising for each log record type of the
2 selected log records, storing log data from the selected log records of the log
3 record type in a respective log data table.

1 15. The method of claim 14, further comprising:
2 reading a plurality of sets of selected log records from the log file;
3 storing log data from the plurality of sets of selected log records in
4 respective relational log-data databases;
5 creating respective database content tables for the respective relational
6 log-data databases.

1 16. The method of claim 13, further comprising:
2 creating a report description table that associates report names with the
3 report identifiers; and
4 displaying a list of report names that correspond to the set of report
5 identifiers.

1 17. The method of claim 13, wherein the list of report names displayed are
2 selectable and linked to respective report functions that generate report data in
3 accordance with predefined formats.

1 18. An apparatus for report selection in a system that provides a plurality of
2 reports, comprising:

3 means for populating a database with selected data elements of a plurality
4 of data types;

5 means for creating a database content table that indicates the data types of
6 the data elements present in the database;

7 means for establishing a report table containing for each report a report
8 identifier and an associated set of report requirements, each set of report
9 requirements identifying a set of data types required for the associated report;
10 and

11 means for outputting a set of report identifiers for which the data types of
12 data elements in the database satisfy the associated sets of report requirements.

1 19. An apparatus for selection of reports of log data generated by software
2 executing on a host data processing system, wherein the log data are stored by
3 the host system in a sequential log file of log records of different log record types,
4 the method comprising:

5 means for establishing a report table containing for each report a report
6 identifier and an associated set of report requirements, each set of report
7 requirements including a set of log-record-type identifiers indicating which of the
8 log record types contain log data required for the associated report;

9 means for reading selected log records from the log file;

10 means for storing log data from the selected log records in a relational log-
11 data database;

12 means for creating a database content table that indicates the log record
13 types of the selected log records; and.

14 means for outputting a set of report identifiers of reports for which the log
15 data in the database content data table satisfies the set of report requirements of
16 associated report definitions.

- 1 20. A log data processing system, comprising:
2 a host data processing system configured for execution of a plurality of
3 application programs, the host system further configured to store log data
4 pertaining to the application programs in a sequential log file of log records of
5 different log record types; and
6 a second data processing system coupled to the host system, the second
7 system configured to initiate reading of selected log records from the log file in
8 response to a first request that includes a first code indicating at least one user-
9 specified log record type, convert log data from the selected log records to a
10 format suitable for storage in a relational database, and store the data of the
11 second format in a relational database by the log record types, wherein the
12 second data processing system is further configured to establish a report table
13 containing for each report a report identifier and an associated set of report
14 requirements, each set of report requirements including a set of log-record-type
15 identifiers indicating which of the log record types contain log data required for
16 the associated report, create a database content table that indicates the log record
17 types of the selected log records, and output a set of report identifiers of reports
18 for which the log data in the database content data table satisfies the set of report
19 requirements of associated report definitions.